

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C., 20460OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTIONPC Code: 128850
DP Barcode: 358056MEMORANDUM

June 1, 2010

SUBJECT: **Glufosinate-ammonium:** Transmittal of Data Evaluation Records for Environmental Fate Studies.**TO:** Jose Gayoso, Chemical Review Manager
Tom Myers, Team Leader
RMIB II / PRD (7508P)**FROM:** Greg Orrick, Environmental Scientist
ERB IV / EFED (7507P)*Greg Orrick 6-1-10***REVIEWED BY:** Charles Peck, Environmental Engineer
ERB IV / EFED (7507P)*Charles Peck 6-1-10***APPROVED BY:** Mark Corbin, Acting Chief
ERB IV / EFED (7507P)*Mark Corbin 6-1-10*

This memo is to inform you that four (4) DERs for glufosinate-ammonium are finalized. Eleven (11) electronic files are associated with the finalized DERs. Study MRIDs and classifications are listed in **Table 1** below. The results of the reviewed studies do not change the conclusions or data gaps discussed in the 2008 problem formulation for the registration review of glufosinate-ammonium (DP barcode 345696). Inclusion of the results of MRID 45204402 reduces the mean aerobic aquatic metabolism half-life for glufosinate-ammonium by 16%. The upper-bound on the mean half-life used for aquatic exposure modeling is reduced by 7%.



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Table 1. MRIDs and Classifications for Environmental Fate Studies of Glufosinate-ammonium.

MRID	Study Type	DER Electronic File Name	Study Classification
45215401	Anaerobic Aquatic Metabolism	128850 45215401 835.4400.doc 128850 45215401 835.4400 Calcs.xls 128850 45215401 835.4400 Data.tif	Unacceptable
45204401 45204402	Aerobic Aquatic Metabolism	128850 45204402+ 835.4300.doc 128850 45204402+ 835.4300 Calcs.xls 128850 45204402+ 835.4300 Data.tif	Supplemental
47542601	Terrestrial Field Dissipation	128850 47542601 835.6100.doc 128850 47542601 835.6100 Calcs.zip	Upgradeable
45204403	Aquatic Field Dissipation	128850 45204403 835.6200.doc 128850 45204403 835.6200 Calcs.xls 128850 45204403 835.6200 Data.tif	Upgradeable

Table 2 identifies studies by MRID that offer data for each guideline requirement. Also listed are study classifications, whether or not the studies are collectively sufficient for the data requirement, and whether or not additional data are needed. As **Table 2** indicates, an acceptable independent laboratory validation(s) of submitted analytical methods for residues in soil and in water, acceptable storage stability data, and additional aquatic field dissipation study data would satisfy the environmental fate data needed for exposure assessment at this time.

Table 2. Environmental Fate Data Submitted for Glufosinate-ammonium.

OCSP Guideline	Data Requirement	Submitted Studies (MRID)	Classification	Sufficient for EFED?	Current Additional Data Need
835.2120	Hydrolysis	40345656	Acceptable	Yes	None
835.2240	Aqueous photolysis	40345657 41323115	Supplemental Acceptable	Yes	None
835.2410	Soil photolysis	40345658 41323116 41323117 41920102	Supplemental Unacceptable Unacceptable Acceptable	Yes	None
835.4100	Aerobic soil metabolism	40345659A,C,D 40345659B 40501018 41323118 41323119 41920103	Supplemental Supplemental Unacceptable Supplemental Supplemental Supplemental	Yes	None
835.4200	Anaerobic soil metabolism	40501014 41323119 41323120	Supplemental Supplemental Supplemental	Yes	None
835.4400	Anaerobic aquatic metabolism	45215401 46258601	Unacceptable Supplemental	Currently, yes	None
835.4300	Aerobic aquatic metabolism	40345660 45204402/ 45204401	Acceptable Supplemental	Yes	None
835.1230/ 835.1240	Adsorption/ desorption/ aged leaching	40345661 40345662 41323121	Unacceptable Acceptable Supplemental	Yes	None

OCSPP Guideline	Data Requirement	Submitted Studies (MRID)	Classification	Sufficient for EFED?	Current Additional Data Need
835.1410	Volatility - lab	41323122 41920104	Unacceptable Supplemental	Yes	None
835.6100	Terrestrial field dissipation	40345663	Supplemental	No	Independent laboratory validation of submitted analytical method(s) for residues in soil and in water; acceptable storage stability data over sufficient duration
		40345664	Supplemental		
		40345665	Supplemental		
		41323123	Unacceptable		
		41323124	Supplemental		
	Storage stability	41920106	Unacceptable		
		43110402	Acceptable		
		43766915	Acceptable		
		43766916	Acceptable		
		47542601	Upgradeable		
	Analytical method in soil	40345667	Unacceptable		
		40345666	Upgradeable		
		41323123	Upgradeable		
		41920106	Upgradeable		
		43766915	Upgradeable		
		47542606/ 47542607	Upgradeable		
835.6200	Aquatic field dissipation	45204403	Upgradeable	No	Independent laboratory validation of the analytical method, storage stability data, and additional study data are needed to upgrade the study classification
850.1730	Fish bioaccumulation	40501017 41323130	Supplemental Acceptable	Yes	None